ARISTA
Talk to us. We listen.

42" FHD Industrial Waterproof Touch Screen Display

ADM-5842AX

USER MANUAL

Thank you for purchasing the ADM-5842AX Industrial Waterproof LCD Display. We are confident that you will be pleased with the performance and reliability of your new display. The display is designed to be operated in harsh environments, meet the screen performance requirements of today's demanding industrial applications. While complying with a wide variety of industrial video formats, it delivers a larger screen area, higher resolutions, and greater color accuracy than many displays in its price range.

Publication date: 2014/09/02
Version No.: V2.1

Product safety precautions

Read all of these instructions and save this manual for later use. Follow all warnings and instructions on the product.

- Relative humidity: 25%~80%
- Storage temperature: -20°C to 60°C(-4F to 140F)
- Operation temperature: 0~50°C(32F to 122F)
- Unplug the unit when not in use for an extended period of time.
- Consult a service technician if the display does not operate normally when you have followed the instructions in this manual.
- Do not attempt to repair this product yourself. Always get a qualified service technician to carry out adjustments or repairs.
- Do not place heavy objects on the unit.
- Use only the power cord supplied with the unit. In the event that another power cord is used, one that is different than the one provided by the supplier, make sure that it is certified by the local and applicable national standards.
- If the power cable is faulty in any way, please contact the manufacturer or the nearest authorized repair service provider for a replacement.
- The power supply cord is used as the main disconnect device. Ensure that the socket outlet is easily accessible after installation.
- Overloaded AC outlets, extension cords, frayed power cords, and broken plugs are extremely dangerous. They may, and can, result in an electrical shock or fire hazard. Call an authorized service technician for any replacements.
- Hands must be dry when plugging in the power cord into an AC outlet to prevent electrical shock. Do not damage the power cord by disassembling, bending, pulling or exposing it to heat as it may cause a fire or electrical shock.
- Make sure to completely insert the power plug. Insecure connections can cause a fire.
- Unplug the display if cleaning is needed. The screen may be wiped with a dry or slightly damp cloth when the power is off.

Important: Read all the contents of this instruction manual carefully before you first use the ADM-5842AX Industrial Waterproof display.

Contents

Product safety precautions 2
Contents 3
Chapter 1 Welcome 4
Introduction 4
Features 5
Product specifications 6
Unpacking 8
Chapter 2 Basics 9
Interfaces and remote control 9
Remote control 11
Remote OSD 13
Configuration 14
Physical dimensions 15
Chapter 3 Connections 17
Pins in the VGA port 18
Pins in the RS-232 touch port 19
Pins in the Remote OSD connector 20
Mounting the Local Host Transmitter 21
Mounting the display 24
Connecting the Local Host Transmitter 26
Connecting the ADM-5842AX display 27
Checking connectivity for the ADM-5842AX 29
Adjusting the video quality on the display 30
Chapter 4 Settings 31
Installing the eGalaxTouch Utility 31
Using the eGalaxTouch Utility 32
OSD Settings 34
Chapter 5 Appendix 37
Maintenance and Troubleshooting 37
Product Limited Warranty 38
Frequently Asked Questions 42
Disposal and Recycling Information 43
Disclaimer and Copyright Notice 43

Chapter 1 Welcome

Introduction

Arista Corporation's 42" industrial waterproof LCD displays are designed to operate in harsh environments, and are ideally suited for a wide variety of industrial environments and outdoor use.

This industrial waterproof LCD display consists of a 42", full HD display and a smart Local Host Transmitter.

The high resolution, full HD display is capable of displaying large amounts of critical production and process information, and provides floor personnel with easy-to-see and easy-to-read production targets, cadence, alarms, machine uptime and downtime measurements, and OEE (overall equipment effectiveness), thus helping to improve productivity and efficiency in the work place.

With just one cost-effective RJ-45 LAN cable, the Local Host Transmitter lets you extend video signals that cover distances of up to 330m (1,000ft). The Local Host Transmitter is situated near the signal source, and the ADM-5842AX full HD display can be placed in your preferred location. With built-in EQ and GAIN control, the transmission path can be adjusted to adapt to the cable quality and video bandwidth to attain desired video quality. Due to loss from long distance transmissions, the VGA RGB delay control (de-skew) function provides compensation for R, G, B color channel signals over a normal LAN cable.In order to give the user more control, the Local Host Transmitter also has a built-in RS-232 half-duplex long range extender along with the VGA video signals.

Features

For the display

- 42” industrial waterproof display, full HD 1920 x 1080 resolution
- 16:9(wide) aspect ratio.
- LCD protected by tempered glass.
- High quality, waterproof stainless steel bezel
- Computer video signals of VGA, SVGA, XGA, SXGA, WXGA, UXGA, WUXGA standard.
- Supports vertical refresh rate of up to 75Hz for VGA, SVGA and XGA of VESA standard specification.
- True XGA with expansion support from DOS, VGA, SVGA.
- Analog RGB signal direct input offers multiscan function.
- Color supports up to 8 bits per color, total 16 million colors.
- Strengthened protective glass(anti-reflective optional).
- Sunlight readable option
- High brightness, contrast and wide viewing angles
- Single control operation and transparent On-Screen-Display (OSD) user interface. Full control of all relevant display and interface parameters via OSD.
- Meets IP-67 requirements.

For the Local Host Transmitter

- Transmission distances of up to 330m/1000 feet
- Provides a VGA interface on the transmitter for local use
- Supports local and remote VGA monitors.
- Can extend signals using a simple RJ-45 LAN cable.
- No software is required, easy installation, and supports plug-and-play.
- Perfect image quality, strong anti-interference performance, image clarity and brightness are adjustable
- Supports RS-232 half-duplex
- Adjustable equalization on remote display
- Adjustable gain control on remote display
- De-skew compensation available for RGB delay control
- Wall mountable case for better stability
- Supports a PC, SUN, MAC or ELINX switch with VGA video
- Multi-platform support: Windows 2000/XP/Vista/Server 2000/2003/2008, Solaris, Linux, FreeBSD, and MAC OS 9/10
- Built-in lightning & surge protection
- Super interference rejection

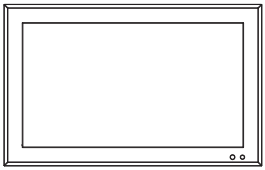
Product specifications

Specifications	Display
LCD Display	
Display Size (Diagnol)	42 inch
Resolution	1920 x 1080
Backlight Lifetime (Hours)	50,000
Visual Characteristics	
Colors	16 Million
Aspect ratio	16:9
Viewing angle (V/H)	178° / 178°
Response time(Typical)	6.5 ms
Pixel Pitch(mm)	0.4845 x 0.4845
Contrast ratio	2,500:1
Brightness	500 nits
Touch Screen	
Technology	Infrared
Touch rating	27 Million Touches
MTBF	300,000 hours
Interface	RS-232
Platform	WinXP Pro, Win XPe, Win 7
Receiver	
Video bandwidth	350MHz
Video support	VESA
Equalization	Continuous analog control
RGB delay control	Yes
ESD protection	Core chipset — ±8kV
Input	1 x RJ-45
Power/Thermal Specs.	
Power Requirement (Max)	110va@ 2.2A, 220VAC@ 1.1A 24 V DC @10A
Power Consumption (Max)	234W
Heat Dissipation	798 BTU/hr
Physical Information	
Mounting	VESA Mount
Net Weight	180 Lbs / 81.6Kg
Physical Dimension (WxHxD)	42.85 x 26.85 x 3.35 inch 1089 x 682 x 85 mm
Environmental	
Operating Temperature	0° - 50° C (32° - 122° F)
Storage Temperature	-20° - 60° C (-4° - 140° F)
Relative Humidity	0% - 95% (non-condensing)
Rating	NEMA 4X
Certification	N/A

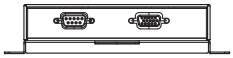
Specifications	Local Host transmitter
Technical Information	
Video bandwidth	350MHz
Transmission	WUXGA [1920x1080] — 330m (1,000ft) [CAT5e]
Audio support	No
RS-232 signal type	Half-duplex & baud rate
Input video signal	1.2 Volts [peak-to-peak]
Equalization	Continuous analog control
RGB delay control	Yes
Loop-out	1 VGA loop-out at TX
ESD protection	[1] Human body model — ±15kV [air-gap discharge] & ±8kV [contact discharge] [2] Core chipset — ±8kV
PCB stack-up	4-layer board [impedance control — differential 100Ω; single 50Ω]
Input	1x VGA, 1x RS-232
Output	1x RJ-45, 1x VGA
VGA connector	HD-15 [15-pin D-sub female]
RJ-45 connector	WE/SS 8P8C with 2 LED indicators
RS-232 connector	DE-9 [9-pin D-sub female]
Physical Informaiton	
Mounting	Wall mounting, Din-Rail mounting
Net Weight	0.530kg
Physical Dimension	6.19 X 4.04 X 1.35 inch/ 157 X 103 x 34 mm (L X W X H)
Mechanical Informaiton	
Mounting	Wall mounting or DIN-RAIL mounting
Power supply	5V/2A DC(Max.)
Power consumption	5 Watts [max]
Operation temperature	0~50^{O}C [32~122F]
Storage temperature	-20~60^{O}C [-4~140F]
Relative humidity	20~90% RH [no condensation]

Unpacking

Open the package and inspect the items carefully to make sure no item is damaged and all items listed are present in your package.



ADM-5842AX Display x1



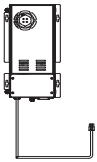
Local Host Transmitter x1

Remote OSD x1

Remote control x1

6 feet VGA cable x1

6 feet RS-232 cable x1



AC/DC power supply x1

6 feet AC power cord x1

RJ-45 LAN Cable x1

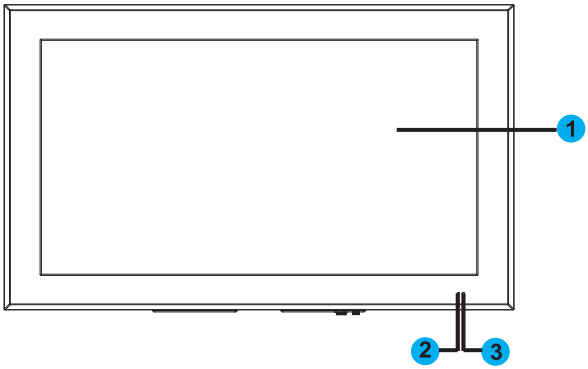
Driver CD Rom x1

Chapter 2 Basics

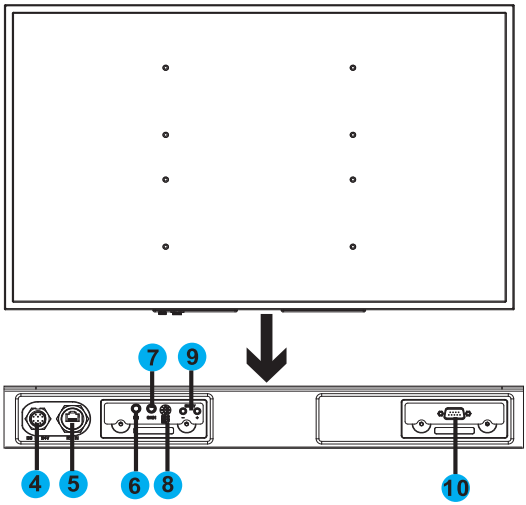
Interfaces and remote control

Display

Front View



Rear View



1 **Display screen**

2 **Power indicator-** green for working mode, red for standby mode.

3 **Remote control IR receiver**

4 **DC 24V input**

5 **TX RJ-45 LAN port -** for touch screen and video-in

6 **EQ knob-**Rotary control for equalization of R, G, B color channel

7 **GAIN knob-** Rotary control for gain

8 ***De-skew compensation control knob:***

0,2,4((0-Blue, 2-Green, 4-Red): De-skew compensation for delay of respective RGB color channel

1, 3, 5(1-Blue, 3-Green, 5-Red): De-skew compensation for equalization of respective RGB color channel

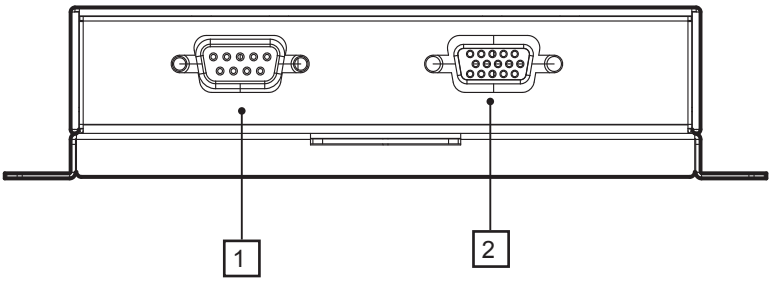
7: De-skew compensation for Gain.

9 **Decrease or increase the level of de-skew compensation or RGB delay control**

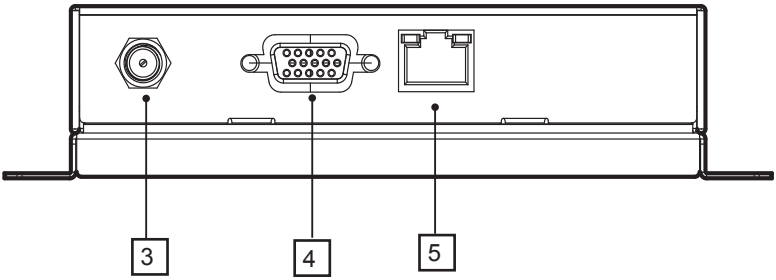
10 **Remote OSD connector**

Local Host Transmitter

Front View

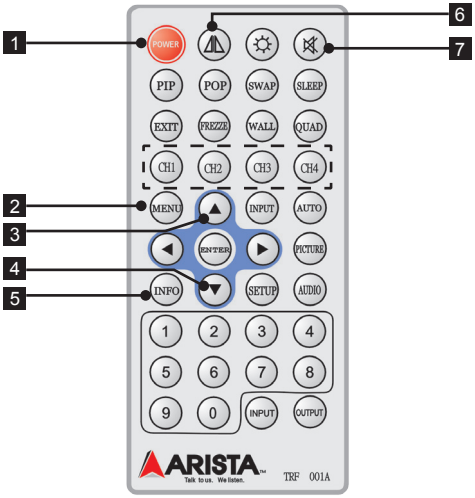


Rear View



No.	Connection	Description
1	RS-232 IN	RS-232 signal source input(for touch screen use)
2	VGA IN	VGA signal source input
3	DC IN	5V/2A DC input
4	VGA OUT	Local host VGA signal output(connect to display monitor-optional)
5	LOCAL OUT	Transmitting signal flow(connect to ADM-5842AX display via RJ-45 LAN cable)

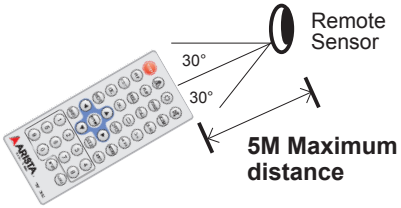
Remote Control



Buttons	Description
1 **POWER**	• Power on or power off.
2 **MENU**	• Press MENU to bring up the settings menu such as: Brightness,Contrast, etc.
3 **▲ UP**	• Move the cursor or increase the data value of settings.
4 **▼DOWN**	• Move the cursor or decrease the data value of settings.
5 **INFO**	• Press to display channel information, resolution, color space, etc.
6 **Reset**	• Reset settings to factory defaults.
7 **Mute**	• Press to eliminate or restore playback sound.

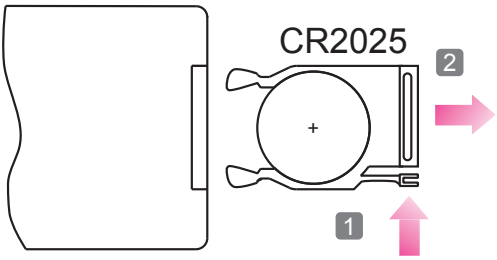
Using the Remote Control Correctly

Point the remote control unit no more than 5 meters from the sensor and within 60° of the front of the display.



Battery Installation for the Remote Control

Push 1 and pull 2 to open the battery compartment. Insert the battery and match the (+) and (-) on the battery to the indicated marks.



Note:

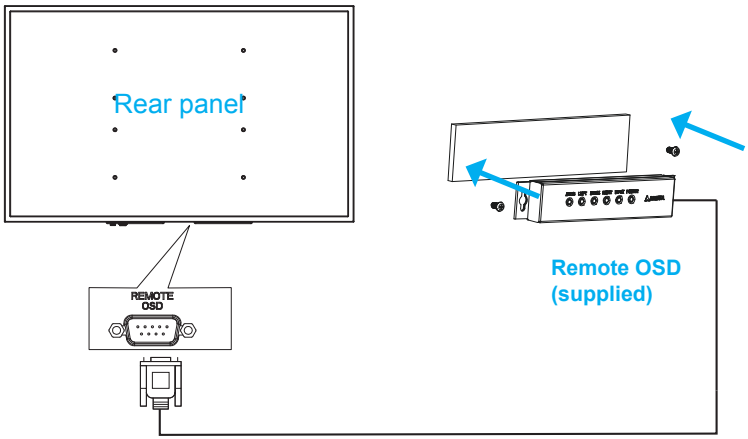
- The battery in the Remote Control normally lasts for about one year, although this depends on how often and for what operations the Remote Control is used for.
- Use a 3V lithium battery (No. CR2025 or equivalent).
- Be careful when you press the slot of the battery compartment. Apply pressure gently with your fingernails to avoid damages.
- Please take caution in using small button batteries and cell batteries as they are potential choking hazards for young children. Keep stray and loose batteries away from children.
- Seek medical advice if you believe a cell or button battery has been swallowed.
- The battery must be disposed of properly according to local laws and regulations.

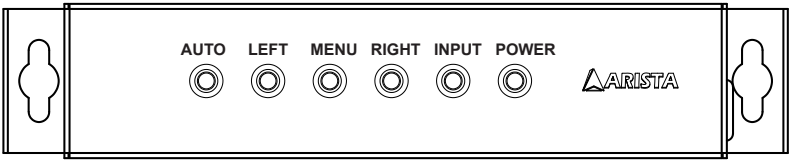
Remote OSD

The remote OSD(on screen display) that came with the unit is used for operating the on screen controls on the display. Users can also affix it onto a wall or board for ease of use and convenience.

Connecting the Remote OSD

- Follow the steps below to connect the Remote OSD:
- **Step1:** As shown in the figure below, the Remote OSD can be affixed to a wall, board or bracket with the use of screws.
- **Step2:** Use the Remote OSD cable to connect to the connector located at the rear of the ADM-5842AX display.





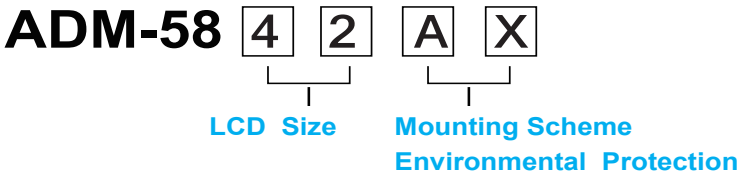
Buttons	Description
AUTO	Press this button to automatically adjust the display aspect ratio.
LEFT/Right	Press for selecting, navigating or adjusting values in the menu/option screen.
MENU	Press to display the options/menu screen
INPUT	Press to confirm selection.
POWER	Power On/Off control.

Configuration

There is a label located on the back of the unit that shows the unit's serial number and configuration. The serial number is unique to the unit, and the configuration indicates the options the unit was built with.
The configuration is given in two parts: the model number and the order information.

Model number

The model number can be parsed as followed:
For more detailed technical information, including configuration layout, please contact Arista customer support at (510) 226-1800, ext. 400



Order information

The ordering information for each configuration is defined below.

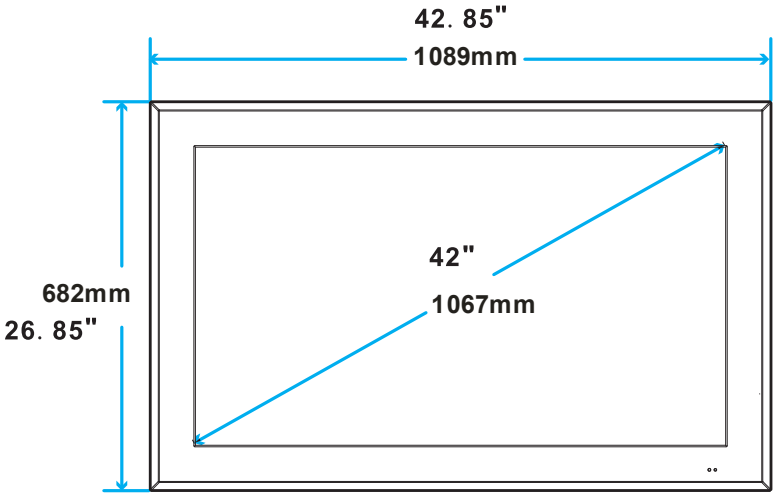
	ADM-5842AX-004	ADM-5842AX-005	ADM-5842AX-Z04	ADM-5842AX-Z05
LCD Display	42" Wide Screen	42" Wide Screen	42" Wide Screen	42" Wide Screen
Touch Screen	IR	IR	No Touch	No Touch
Bezel	Stainless steel	Stainless steel	Stainless steel	Stainless steel
Power Supply	24VDC Input	110/220VAC Input	24VDC Input	110/220VAC Input
	ADM-5842AX-004-VHB	**ADM-5842AX-005-VHB**	**ADM-5842AX-Z04-VHB**	**ADM-5842AX-Z05-VHB**
LCD Display	42" VHB Wide Screen	42" VHB Wide Screen	42" VHB Wide Screen	42" VHB Wide Screen
Touch Screen	IR	IR	No Touch	No Touch
Bezel	Stainless steel	Stainless steel	Stainless steel	Stainless steel
Power Supply	24VDC Input	110/220VAC Input	24VDC Input	110/220VAC Input

Physical dimension

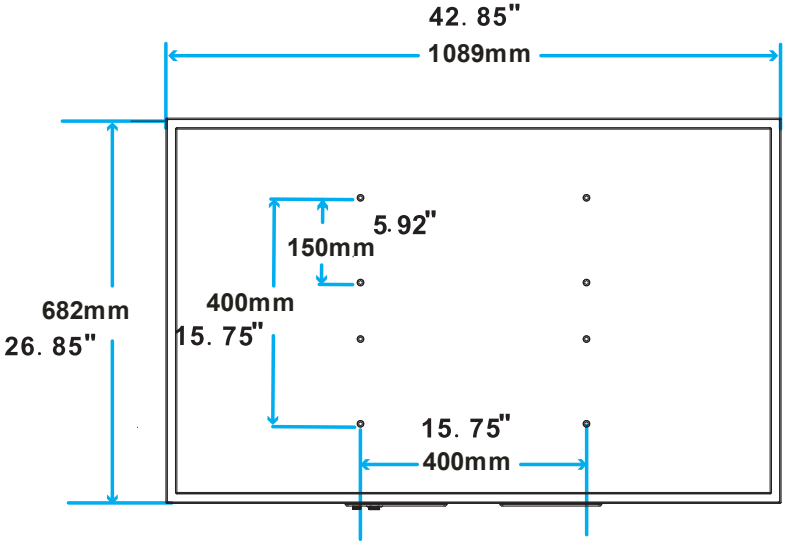
The diagrams below show the physical and specific dimensions of the ADM-5842AX display and Local Host Transmitter.

ADM-5842AX Display

Front view

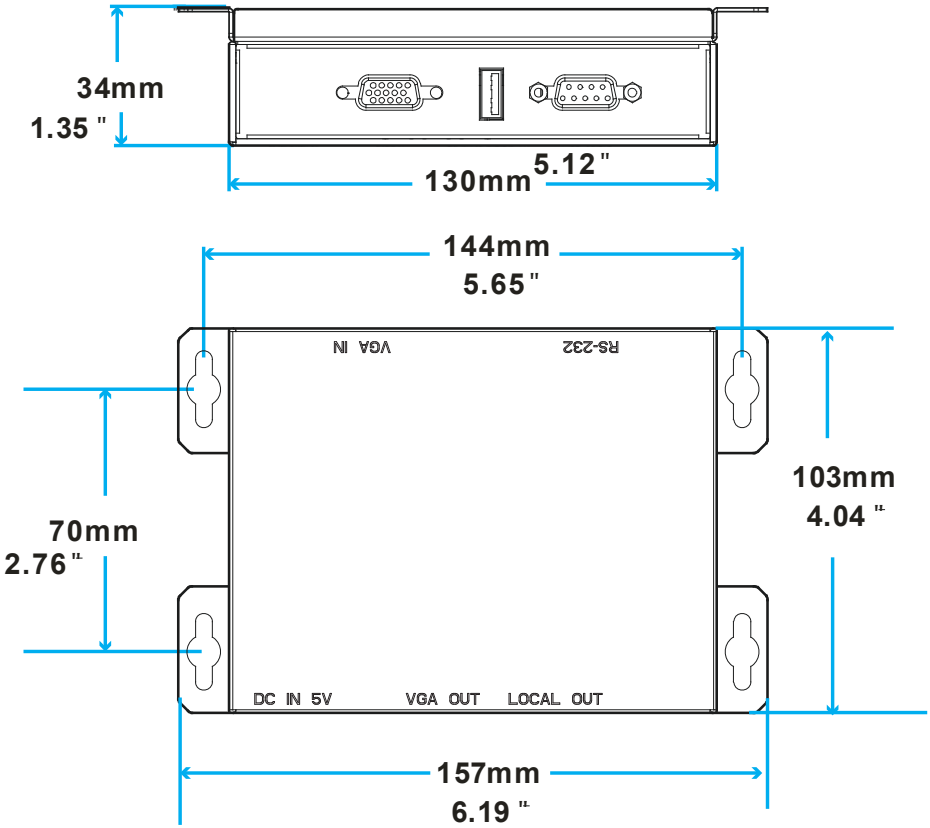


Rear view



ADM - 5842AX Display	L(Overall Length)	W(Overall width)	Height	Weight
	42.85”/1089mm	26.85”/682mm	3.35”/85mm	81.6 kg

Local Host Transmitter

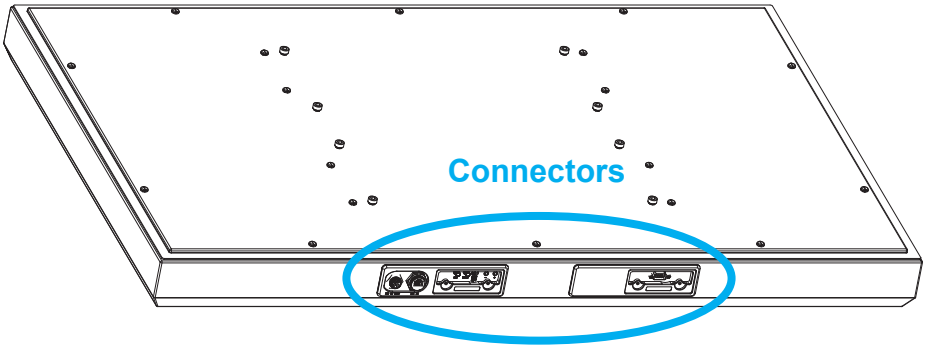


ADM - 5842AX Local Host Transmitter	L(Overall Length)	W(Overall width)	Height	Weight
	6.19”/157mm	4.04”/103 mm	1.35”/34mm	0.530kg

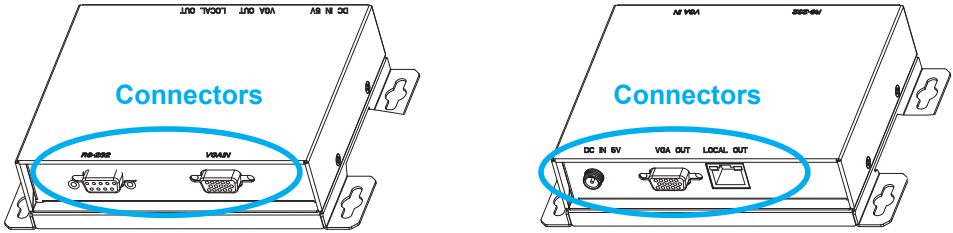
Chapter 3 Connections

This section describes the connections/connectors available on the ADM-5842AX industrial LCD display and the Local Host Transmitter.

Warning! Make sure your display is grounded at all times. Also make sure that it is on the same ground as any other equipment connected to its communications ports.

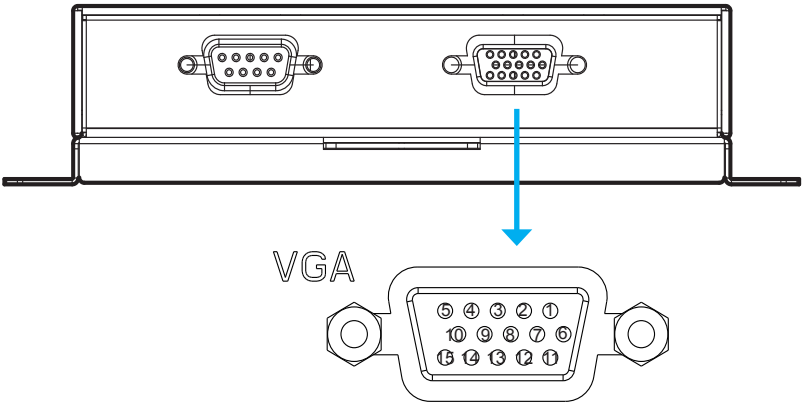


Connectors are located at the bottom of the ADM-5842AX display



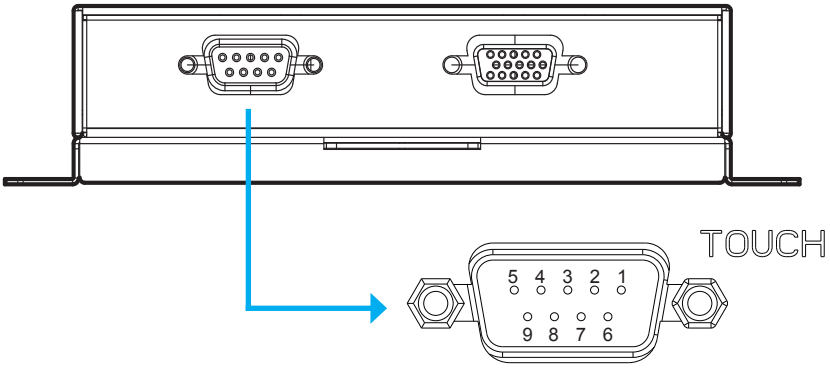
Connectors are located at the front and rear of the Local Host

Pins in the VGA port



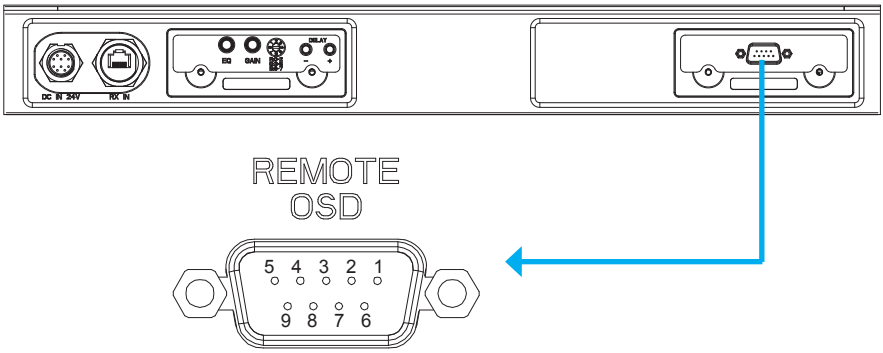
VGA signal input connector			
Pin NO.	Pin Assignment	Pin Description	Remark
1	VGA R	VGA Red signal	
2	VGA G	VGA Green signal	
3	VGA B	VGA Blue signal	
4	NC	No connection	
5	GND	Ground	
6	GND	Ground	
7	GND	Ground	
8	GND	Ground	
9	NC	No connection	
10	GND	Ground	
11	NC	No connection	
12	TXD	ISP program upgrade TXD signal serial transmit data	
13	VGA HS	VGA H-Sync signal	
14	VGA VS	VGA V-Sync signal	
15	RXD	ISP program upgrade RXD signal Serial receive data	

Pins in the RS-232 touch port



RS-232 signal input connector			
Pin NO.	Pin Assignment	Pin Description	Remark
1	NC	No connection	
2	TX	ISP program upgrade TXD signal serial transmit data	
3	RX	ISP program upgrade RXD signal Serial receive data	
4	NC	No connection	
5	GND	Ground	
6	NC	No connection	
7	NC	No connection	
8	NC	No connection	
9	NC	No connection	

Pins in the Remote OSD connector



Remote OSD connector			
Pin NO.	Pin Assignment	Pin Description	Remark
1	NC	No connection	
2	INPUT	Input confirmation	
3	RIGHT	OSD cursor control (right)/setting value adjustment	
4	MENU	Option menu display control	
5	POWER	Power on/off control	
6	LEFT	OSD Cursor control (left)/setting value adjustment	
7	AUTO	Display aspect ratio adjustment	
8	NC	No connection	
9	NC	No connection	

Mounting the Local Host Transmitter

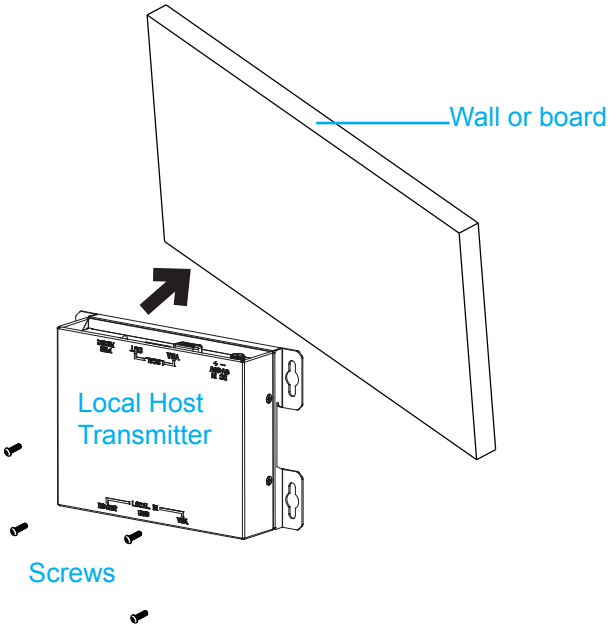
1. Wall mounting

There are two methods to mount the Local Host Transmitter: Wall mounting and DIN-rail mounting.

The Local Host Transmitter can be placed on a shelf, table, or mounted onto a control panel. To mount it onto a control panel, you will require the mounting screws found in the accessory box.

Please follow the steps shown in the diagram below:

- Situate the Local Host Transmitter on a board or a wall. Firmly secure it by screwing it in with the four “#8-32UNC” sized screws.
- Make sure that the Local Host Transmitter is correctly and securely seated onto the board or wall.

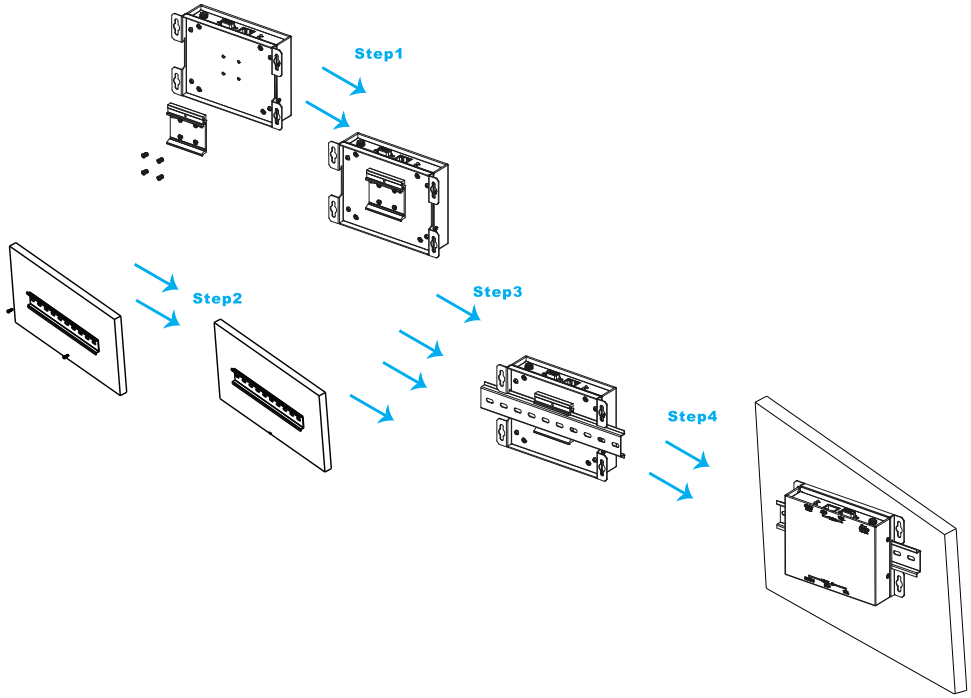


It is very important that the unit is in a suitable environment. Make sure the area is well ventilated, out of direct sunlight, away from sources of excessive dust, dirt, heat, water, moisture and vibration.

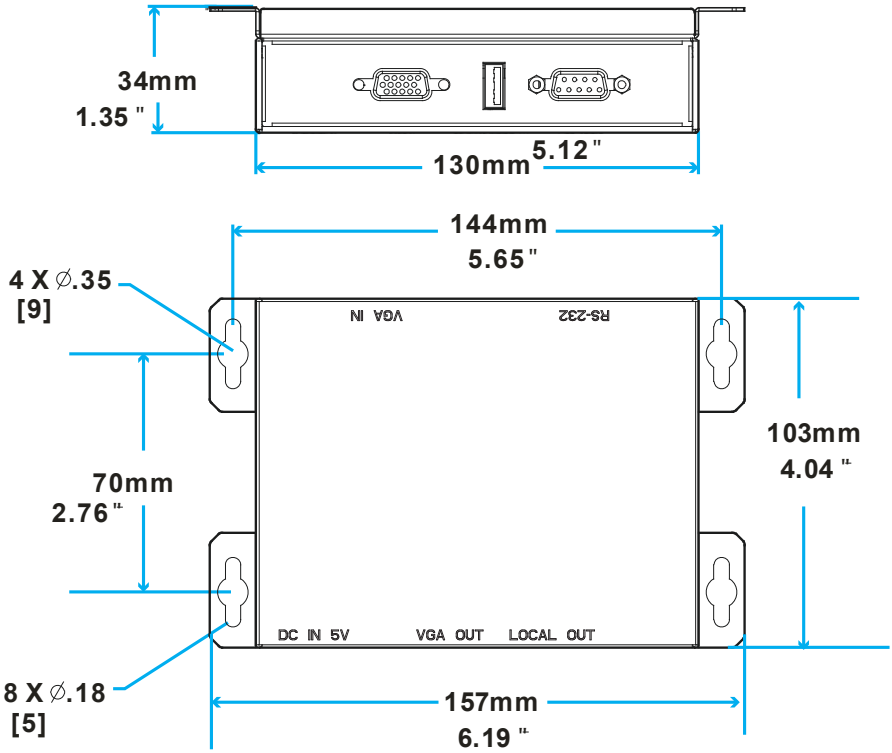
2. DIN-Rail mounting

Please follow the steps as shown below to mount the Local Host Transmitter via DIN-Rail.

- **Step 1:** Place the metal clasp on the back of the Local Host Transmitter, and screw it in using “#6-32UNC screws
- **Step 2:** Place one Din-Rail on the wall or board, and use a screwdriver to tighten the screws to affix the Din-Rail onto the wall or board.
- **Step 3:** Snap the metal clasp onto the Din-rail to mount the Local Host Transmitter onto the wall or board.
- **Step 4:** You can also slide the metal clasp around the Din-rail to move the Local Host Transmitter to a desired position.



In order to correctly install the Local Host Transmitter, the specific dimensions are indicated in the diagram below.



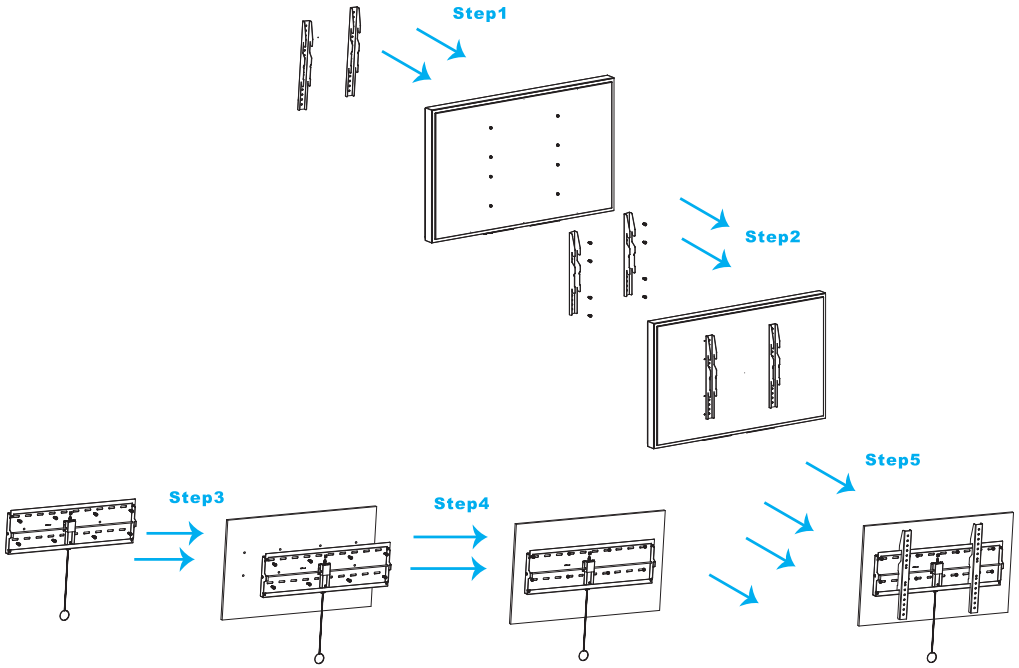
Mounting the display

1. Mounting the display using the VESA mounts and wall bracket

“VESA FDMI Standard” stands for Video Electronics Standards Association Flat Display Mounting Interface Standard. The ADM-5842AX display needs be mounted on a VESA-compliant arm or bracket. And on the ADM-5842AX display, holes have been pre-drilled on the rear of it.

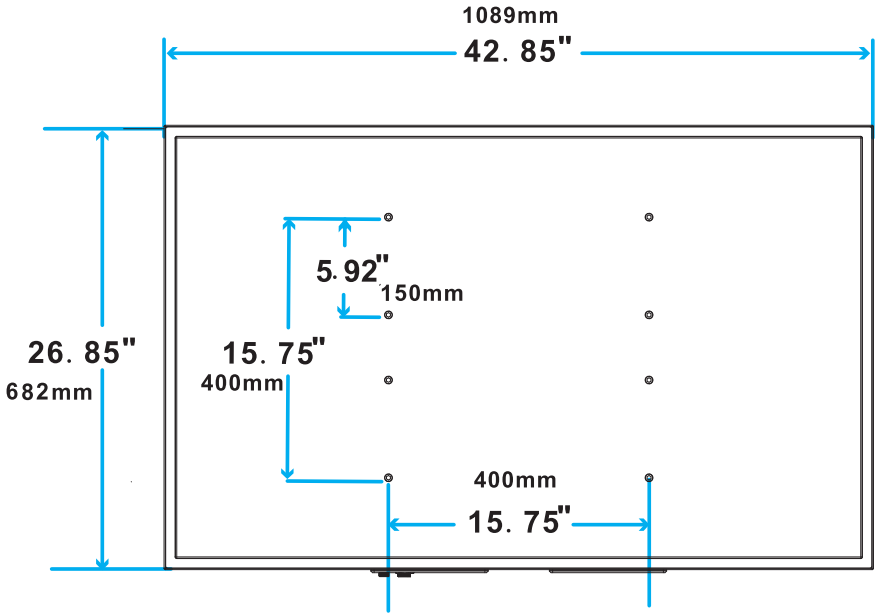
As shown in the figure below, please follow these steps to mount the display.

- **Step 1:** Place two VESA mounts on the back of the ADM-5842AX display, and align the holes on the VESA mounts with the holes on the display.
- **Step 2:** Use a screwdriver to tighten the eight “M8” size screws to fix the VESA mounts on the display.
- **Step 3:** Place one wall bracket on the wall or board, and align the holes on the bracket with the holes on the wall or board.
- **Step 4:** Use a screwdriver to tighten the screws to fix the wall bracket on the wall or board.
- **Step 5:** Mount the display onto the wall or board through the VESA mount and wall bracket.



2. VESA mounting

Mounting
150 x 400mm/5.92 x 15.75 inch



Warning! The ADM-5842AX display needs be mounted on a VESA-compliant mount and wall bracket. Failure to properly and securely situate the display can result in injury to personnel or damage to equipment.

Connecting the Local Host Transmitter

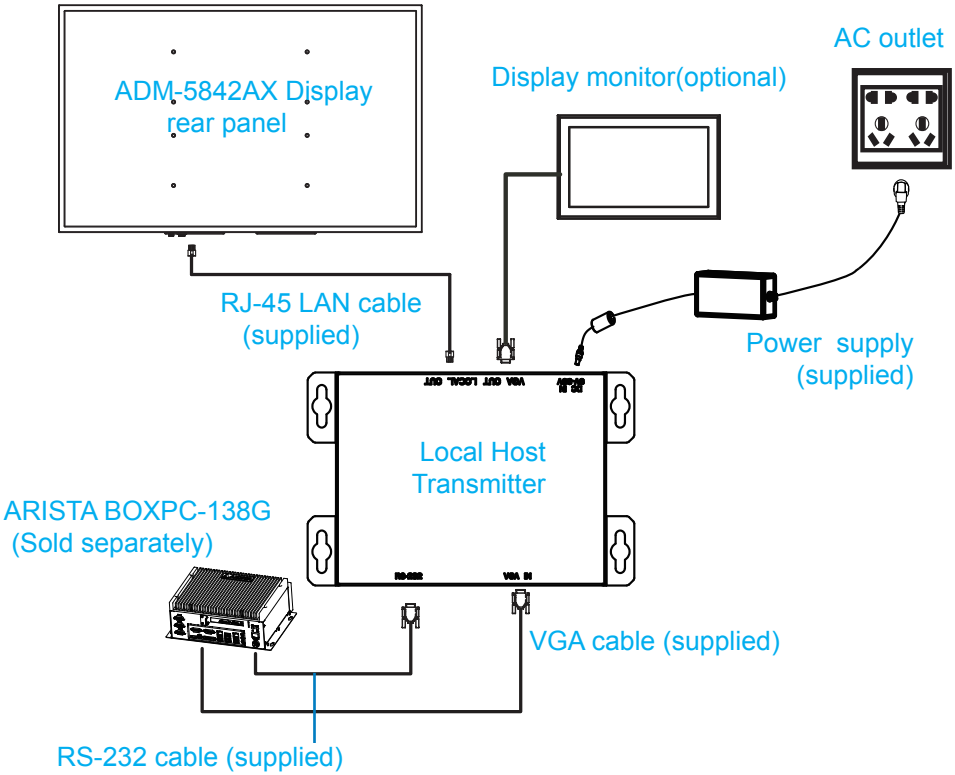
Follow the steps below to connect the Local Host Transmitter.

1. Connecting a computer: Connect one end of the VGA /RS-232 cable to the VGA -IN/ RS-232 port of the Local Host Transmitter. Connect the other end of the VGA/RS-232 cable to the VGA-Out/RS232 port of a computer.

2. Connecting the ADM-5842AX display: Connect one end of the RJ-45 LAN cable to the RJ-45 LAN port of the Local Host Transmitter. Connect the other end of the RJ-45 LAN cable to the TX RJ-45 LAN Port of ADM-5842AX display.

3. Connecting to a Display monitor: Connect one end of the VGA cable to the VGA port of the Local Host transmitter. Connect the other end of the VGA cable to the display monitor.

4. Connecting the power supply: Connect one end of the AC/DC power adapter to the DC-in connector of the Local Host transmitter. Connect the other end of the AC/DC power adapter to an AC outlet.



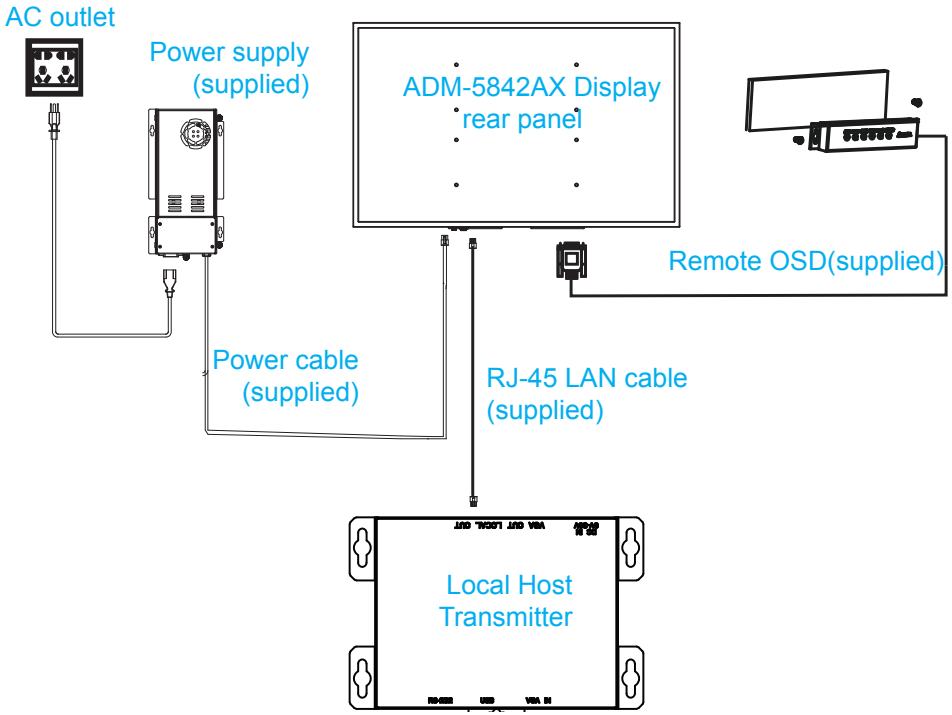
Connecting the ADM-5842AX display

Follow the steps below to connect the ADM-5842AX display.

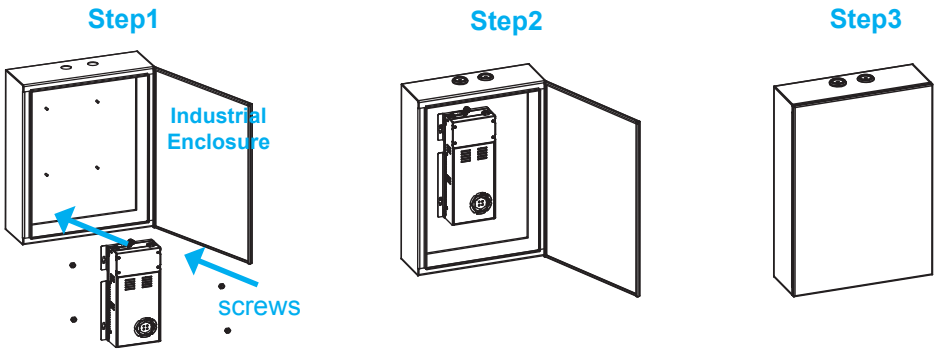
1. Connecting the Remote OSD: As shown below, the Remote OSD can be affixed to a wall, board or bracket with the use of screws. Use the Remote OSD cable to connect to the connector located on the rear of the ADM-5842AX.

2. Connecting the Local Host Transmitter: Connect one end of the RJ-45 LAN cable to the TX port of the ADM-5842AX LCD display. Connect the other end of the RJ-45 LAN cable to the RJ-45 LAN port of a computer.

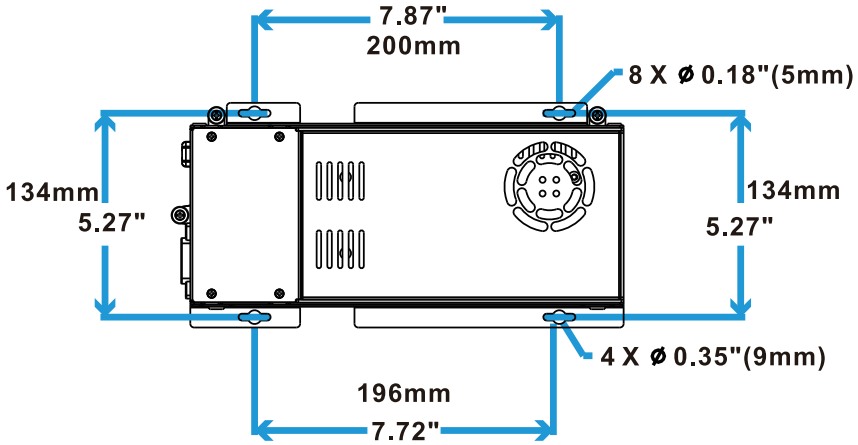
3. Connecting the power supply: Connect one end of the AC/DC power supply to the DC-in(24V) connector of the ADM-5842AX display. Connect the other end of AC/DC power supply to an AC outlet.



The AC to DC 24V power supply provided with the ADM-5842AX does not have environmental protection. In order to meet a degree of protection, the power supply needs to be installed in a specific IP rating enclosure.



In order to correctly install the power supply, the specific dimensions for the power supply are indicated in the diagram below.



Notes:

If, for any reason, the display goes blank and gives an “Out of Range” or “No Input Signal”, your system source is outputting a signal that goes beyond or is incompatible with the LCD’s video A/D board. If this happens, make sure the correct signals are inputted. If the display doesn’t work properly, it may be because:

- The resolution is too high or too low for the LCD.
- The power supply is incorrect or insufficient.

Checking connectivity for the ADM-5842AX

Turning on the ADM-5842AX

- Make sure the Local Host Transmitter connections(see page 26) are done correctly,
- Make sure the connections for the ADM-5842AX display(see page 27) are done correctly.
- Then, do the following to turn the unit on: 1. Turn on your computer or other video devices. 2. Press the **Power button** on the Remote Control or Remote OSD to turn the ADM-5842AX on.

Turning off the ADM-5842AX

- Press the **Power button** on the Remote Control or Remote OSD to turn off the ADM-5842AX display.
- If the display is not going to be in use for an extended period of time, press the **Power button** to turn off the display and disconnect the power cord from the AC outlet.

Warning! Make sure your display is grounded at all times. Also make sure that it is on the same ground as any other equipment connected to its communications ports.

Adjusting the video quality on the display

After the ADM-5842AX display has been turned on for the first time, If a blurred display screen is seen, try to adjust the EQ and Gain rotary knobs to improve the cable skew. GAIN rotary knobs are designed for gain control, and EQ rotary knobs are designed for equalizing the wave form of the receiving video signal. It is suggested to begin with adjusting the EQ rotary knob to get the input video displayed first, and then the GAIN rotary knob to fine tune the image/video quality.

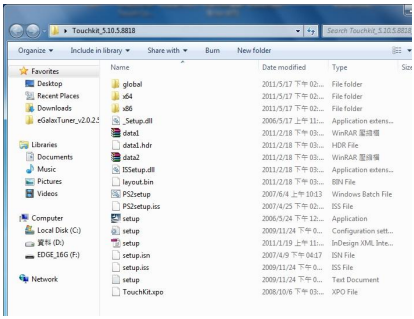
De-skew offers the flexible functionality of allowing skew compensation when VGA (R,G,B) signals weaken due to long range transmissions or through low quality RJ45 LAN cables. Use the (0-7) rotary knob to choose the specific (R,G,B) color channel then use the (+ or -) rotary knob to adjust the skew.There are a total of 31 steps and in each step there is a 2(ns) difference for adjusting the delay between each individual color channel. With this, video quality can be further assured.

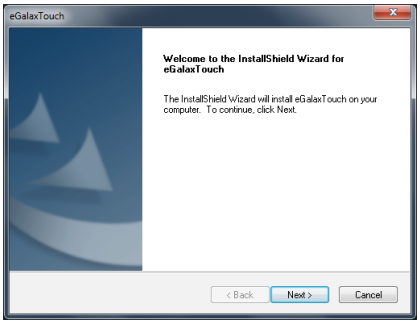
Chapter 4 Settings

Installing the eGalaxTouch Utility

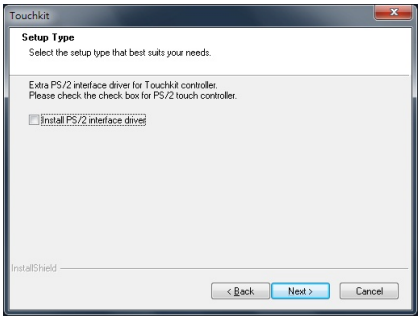
Insert the driver CD into your computer and install the eGalax touch driver software by following the steps below.

1. Double click the “setup” to start the installation of the eGalaxTouch software.

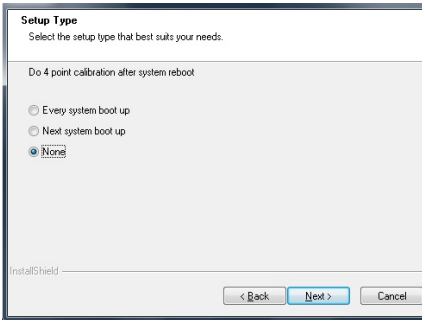


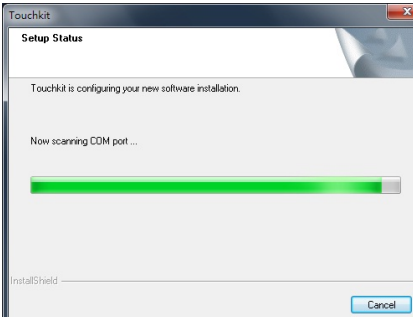

eGalaxTouch
Welcome to the InstallShield Wizard for eGalaxTouch
The InstallShield Wizard will install eGalaxTouch on your computer. To continue, click Next.
< Back
Next >
Cancel

2. Press Next,then a new dialog window will pop up asking if the user wants to install PS/2 touch drivers.

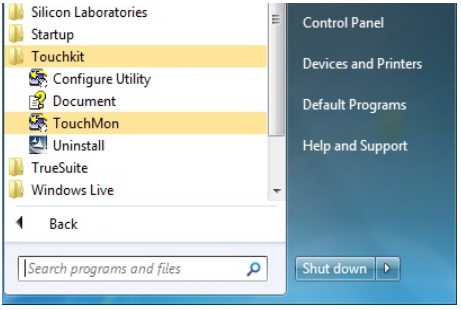

Touchkit
Setup Type
Select the setup type that best suits your needs.
Extra PS/2 interface driver for Touchkit controller.
Please check the check box for PS/2 touch controller.
Install PS/2 interface driver
InstallShield
< Back
Next >
Cancel

3. Click “next”and follow the on-screen instructions to continue the installation.





4. Finally, restart the computer to finish the installation. Then a shortcut will be generated and shown on the desktop. A new file group will also be generated for eGalaxTouch.

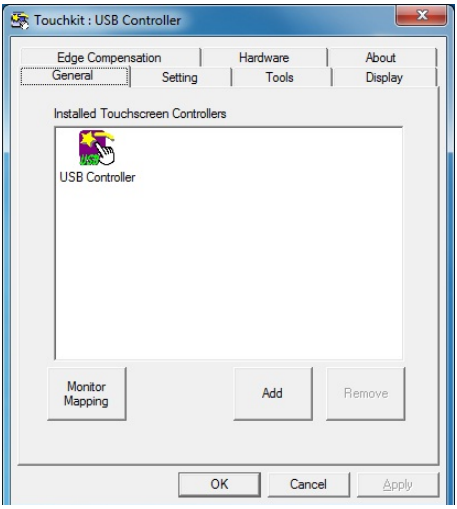


Using the eGalaxTouch Utility

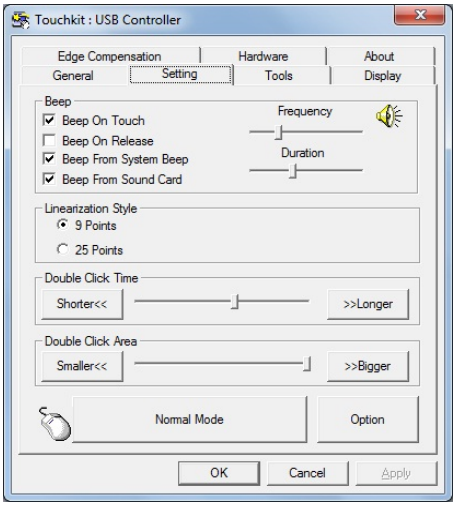
There are seven property tabs in the eGalaxTouch utility window: General, Setting, Tools, Display, Edge Compensation, Hardware and About. Each tab contains different functions for users to adjust to their preferences Therefore, users can easily manage all the eGalaxTouch controller settings through this utility window.

Click on a tab to see its settings. Press "Apply" to confirm settings and press "OK" to save and close the dialog window. Press "Cancel" if no adjustments are needed.

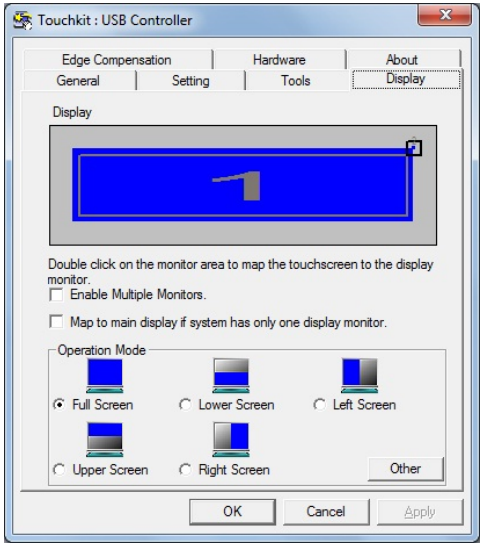
1.General Tab



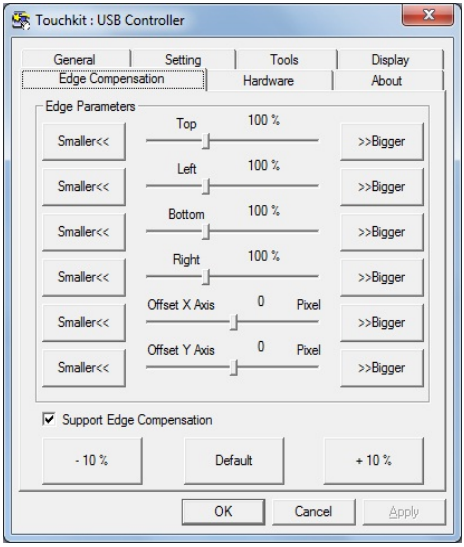
2. Setting Tab



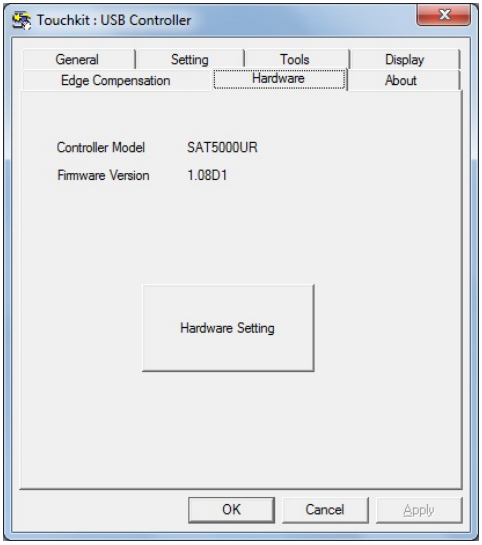
3.Display Tab



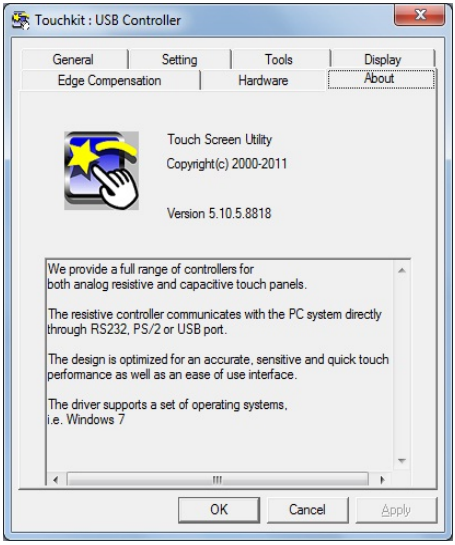
4. Edge Compensation Tab



5. Hardware Tab



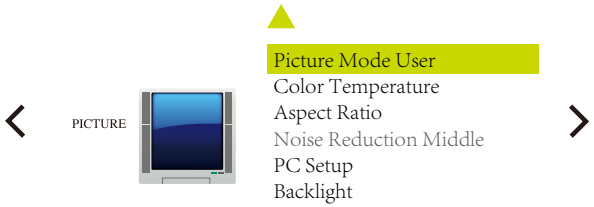
6. About Tab


Touchkit : USB Controller
General
Setting
Tools
Display
Edge Compensation
Hardware
About
Touch Screen Utility
Copyright(c) 2000-2011
Version 5.10.5.8818
We provide a full range of controllers for both analog resistive and capacitive touch panels.
The resistive controller communicates with the PC system directly through RS232, PS/2 or USB port.
The design is optimized for an accurate, sensitive and quick touch performance as well as an ease of use interface.
The driver supports a set of operating systems, i.e. Windows 7
OK
Cancel
Apply

OSD Settings

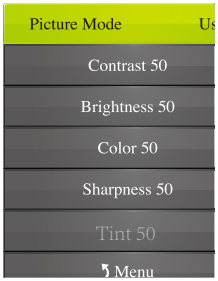
Display settings

1. Press the **MENU button** on the Remote OSD or the Remote control to enter the settings/options menu.
2. the **UP/DOWN buttons** or the **LEFT button** to select. Press the **ENTER button** on the remote control or **INPUT button** on the Remote OSD to confirm. Select and enter the Picture Settings screen.



3. Press the **RIGHT button** to set Picture Mode :User, Dynamic, Mild, and Standard(Press the **RIGHT button** to select through the available options.), then press **ENTER** and/or I**NPUT button** to confirm the setting.Press **MENU button to** return to the previous screen.

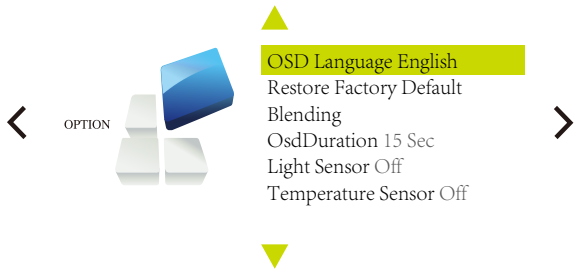
4. Press the **LEFT/RIGHT** buttons to decrease/increase the value of a setting from 0 to 100. Press **ENTER/INPUT** to confirm the setting and exit.



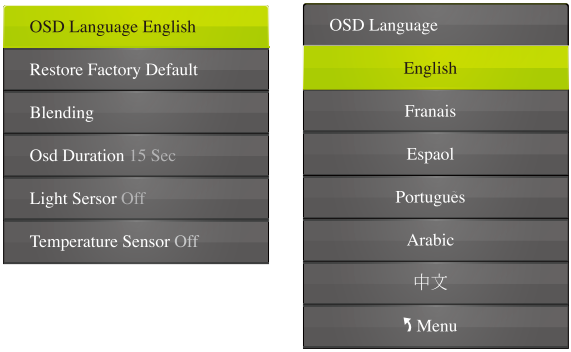
Main Menu	Sub-menu	Options	Description
Picture	Picture mode	User, Dynamic, Standard, Mild	Select display mode.
	Color Temperature	User, Cool, Medium, Warm	Select color temperature mode.
	Aspect Ratio	Auto, 4:3, 16:9, Zoom1, Zoom 2, Just Scan, Panorama	Select the aspect ratio of the viewing screen.
	Noise Reduction Middle		
	PC Setup	Auto Adjust, Horizontal Pos.50, Vertical Pos. 50, Size 50, Phase 4	Set PC screen adjustments.
	Backlight		Select backlight on or off.

System settings

1. Press the **MENU button** to enter the settings/options screen,then press the **Right button** to bring up the system setting screen.



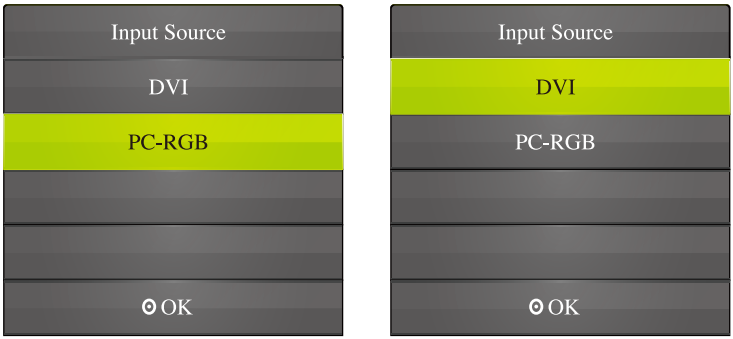
2. Press **the UP/DOWN buttons** on the remote control or the **LEFT button** on the Remote OSD to select a setting. Press **ENTER** and/or **INPUT** to enter/confirm a setting. Press the **MENU button** to return to the previous screen.
3. To exit the settings screen, press the **Exit button** on the remote control.



Option	OSD Language	English	Select the OSD display language.
	Restore Factory Default		**CAUTION**: Choosing this function will reset all your settings to the factory defaults.
	Blending	Off, Low, Middle, High	Select the blending mode.
	Osd Duration	Off, 5 Sec, 10 Sec, 15 Sec	Select OSD duration time.
	Light Sensor	Off, On	Select to turn light sensor on or off.
	Temperature Sensor	Off, On	Select to turn temperature sensor on or off.

Input source settings

1. Press the **MENU button** to enter the settings/options screen, then continuously press the **Right button** to bring up the Input Source setting screen.



2. Press the **UP/DOWN buttons** or the **LEFT button** to select (DVI, PC-RGB) item, then press the **ENTER** or **INPUT buttons** to confirm the selection and exit.

Input Source	DVI, PC-RGB,	Select the input source signal.

Chapter 5 Appendix

Maintenance and troubleshooting

1. Maintenance

Regular maintenance of the ADM-5842AX industrial waterproof display can help prevent damage or downtime.

Warning! Do not operate or service the unit with its chassis open. There are hazardous voltages inside. Service should only be performed by qualified and authorized personnel. Make sure your industrial display is powered down and unplugged before removing the cover or working on internal components.

Replacing the Backlights

LCD backlights are rated at the number of hours of operation until they are at half of their original brightness. The ADM-5842AX industrial waterproof display backlights are rated at 50,000 hours — that equates to six years of continuous service.

Signs that the backlights may need replacing include:

1) The top and/or the bottom of the screen is dim.
2) The image on the screen flickers.
3) The video appears to be blank in normal light, but can be very faintly seen in strong external light.

Note: The backlights are not user serviceable. If the backlights need to be replaced, you must return the unit to Arista for service.

2. Troubleshooting

Before calling for service, you can check the following table on symptoms and solutions.

Symptom	Possible Causes	Actions
No LCD display image	- No power - No video signal	- Verify that the Power On LED is lit. - Check to see that the video source is on and operating, Perhaps the source is outputting to a different display.
Half of the image is dark	- Problem with the backlights	- Contact Arista customer support.
LCD image is too bright or too white	- Adjustments - Unrecognizable sync patterns	- Reset to factory defaults. - Verify the supplied video format (XGA or SXGA).
LCD image is not centered	- Adjustments - Unrecognized video format	- Adjust the positioning. - Verify the supplied video format (XGA or SXGA).
Configuration changes not accepted by the display	- Adjustments	- When making adjustments, be sure to “back out” of the adjustment menus up to the main menu level.
Display jitters or flickers	- Adjustments	- Adjust Phase and Frequency for best image.

3. Product Limited Warranty

Arista Corporation ADM series LCD display purchased in the U.S. and Canada come with a 3-year limited warranty. The following sections describe the limited warranties and return policies for the North America region.

1) Limited Warranty Coverage

- If a product does not work properly because of a defect in materials or workmanship, Arista Corporation will, for the length of a period of three years, starting with the date of the original purchase (invoice date), at its discretion either repair your product with new or refurbished parts, or replace it with new or a refurbished product.
- The decision to repair or replace will be made by Arista Corporation During the “Labor” Limited Warranty period, there will be no charge for labor. During the “Parts” Limited Warranty period, there will be no charge for parts.
- The customer pays the freight for shipping the defective products to Arista Corp. After repairs or replacement, Arista Corporation will ship and pay UPS Ground for the products being shipped back to the customer.
- This Limited Warranty only applies to products purchased and serviced in the North America region. Customers outside of the United States will need to pay the freight for shipping to Arista Corp. and shipping back to the customer after repairs or replacement.

2) Limited Warranty Limits and Exclusions

- This Limited Warranty only covers failures due to defects in material or workmanship, and does not cover normal wear and tear, or cosmetic damages .
- The Limited Warranty does not cover damages due to external causes including, but not limited to, failures which are caused by products not supplied by Arista Corporation.
- The Limited Warranty does not cover damages and/or failures which result from negligence, accidents, misuse, abuse, mishandling, misapplication, alteration, faulty installation, set-up adjustment, improper maintenance, power surge, problems with electrical stability, failure to maintain environmental conditions within operating range specified by the manufacturer, relocations or attempts to relocate systems, lightning damage, modification, service by anyone other than authorized service providers, usage not in accordance with product instructions, failure to perform required preventative maintenance, problems caused by use of parts and components not supplied by Arista, and/or adding or altering components without concurrence from Arista Technical Support.
- Any signs showing that the serial numbers have been altered or tampered with will void this warranty.
- There is no expressed warranty except as stated under “Limited Warranty Coverage”. Under no equitable theory shall Arista Corporation be held liable for monetary and/or non-monetary damages resulting from the normal or abnormal usage of our products. Use, distribution and/or similar engagement of our products constitute implied agreement to these and similar Arista Corporation Limited Liability policies.

4.Technical Support

1) Technical Support Availability

- Arista Corporation is dedicated to your satisfaction. Arista’s Technical Support Team will make every effort to solve the problem over the phone or through e-mail. If we cannot solve the problem over the phone or through e-mail, an RMA number will be issued.
- Information Needed When You Call: Product Serial Number & Details of the Problem.

2) Technical Support Contact Information

- Technical Support Hours: Monday through Friday: 8:30am-5:30pm PST
- Technical Support Phone Number : Phone: (510) 226-1800 ext. 400, Fax: (510) 226-1890
- Technical Support E-mail:support@goaristaipc.com

5. RMA Procedures

Return Material Authorizations

- All returns require an RMA (Returned Material Authorization) number. Please contact Arista's customer service representative or complete the RMA request form to obtain an RMA number prior to returning product.
- Returns will be authorized in accordance with the following policy: If it is deemed that the unit/part should be returned, Arista's customer service representative will give the customer a return authorization number and ship to address to return the product.
- Products will not be accepted by Arista Corp. RMA department for return if not accompanied by a valid RMA number, which must be clearly marked on the outside of the package.
- Products must be returned within 30 days after the date of when the RMA number was issued. After the 30-day period, the RMA number issued will be invalid. Please do not return products with invalid RMA numbers; Contact Arista's customer service representative if your RMA number is invalid.

Warranty Returns

- Products to be returned must be within the applicable warranty period. If the warranty period is over, the original product will be returned to the customer.
- The RMA number for Warranty Return will be issued within 24 hours from the time that the RMA application form is received by Arista.

Non-Warranty Returns

- If the customer wishes to return a product for repair that is no longer within the warranty period, or for damage not covered by the warranty, an Arista sales representative will inform the customer of the estimated cost of the repair.
- Return of the product will count as the authorization to repair and agreement to pay for the cost of repair, whether or not it exceeds the original estimate.

6. RMA Credit Policy

Returns for Credit & Credit Types

Returns for credit that require Arista's management approval may take up to 48 hours for processing/approval. Products can be returned for credit with the following conditions:

Dead on Arrival (DOA): Customer must report DOA units to Arista's RMA department in 14 calendar days after the product is received. Customer can request either return for credit or replacement. If replacement is requested, Arista will ship the replacement in 7 calendar days and invoice the customer for the replacement. A credit memo will be issued to the customer after the DOA product is received and verified.

Evaluation Return: Customer must notify Arista's RMA department before or at the end of the evaluation period if the customer decides to return the evaluation unit. An RMA number must be obtained from Arista prior to returning the unit.

Short Shipment: The customer must report for any item received short-shipped or wrong products received in 7 calendar days after the product is received. The customer can request either: shipment of missing items, replacement of wrong items or return for credit. If shipment of missing items or replacement of wrong items is requested, Arista will ship the replacement in 7 calendar days. A credit memo will be issued to the customer after the returned product is received and verified.

Non-Open-Box Return: In the event, where a customer places an incorrect order, over stock or double orders. The customer can request return for credit with the following restocking fee applied.

Restocking Fee: A 15% restocking fee would apply to the non-open-box when returned within 3 months after invoice date. A 30% restocking fee would apply to the non-open-box returned within 6 months. Beyond 6 months after invoice date, a 50% restocking fee would apply to the non-open-box returned within 12 months. Beyond 12 months after invoice date, Arista will not grant authorization to return the non-open-box for credit.

Return Condition: All valid returns for credit products must be returned in the original packaging in "as new" condition with all items and accessories originally shipped with the product. Any damages will be assessed and the cost of repair or refurbishment will be deducted from the credit issued.

No Credit DOA: No credit will be given to the customer for DOA products received by Arista beyond 30 calendar days after the invoice date. No credit will be given to all non-cancellable, non-returnable, custom order parts.

7. RMA Transportation Policy

Transportation Charges

- All customers are responsible for all freight charges involved in shipping the defective products back to Arista Corporation will cover the cost of returning products that are under warranty via UPS Ground to customers in the United States after repairs or replacement.
- International customers are responsible for all transportation, insurance, duties and other similar charges for all returned products shipped outside of the United States must ensure that the product is appropriately packaged. Shipping damages resulting from improper packaging will be the customer's responsibility.
- Arista is not responsible for products lost during shipment. All products being returned for Limited Warranty repair or replacement must be sent freight prepaid.

Transportation Damages

- In cases of transportation damage, the customer is responsible for filing any and all claims with the shipping carrier.
- To avoid any potential risk that an RMA product is lost or damaged while in transit to Arista, it is recommended that the customer insures and declares the full value of the RMA product. The customer is 100% responsible for the RMA product while in transit to Arista.
- We urge customers to pack the RMA product carefully to avoid transit damage.

Refused Shipment Restocking Fees

- If a customer refuses a shipment, credit will be issued after the refused product is received and verified by Arista. The shipping charge plus 15% restocking fees will be billed to the customer.

8. RMA Shipping Instruction

Product Non-Acceptance

- Products will not be accepted by Arista Corporation if not accompanied by a valid RMA number, which must be clearly marked on the outside of the package.
- Any products refused by Arista will incur the fees and/or charges applied by the shipping carrier, and shall be the sole liability of the original shipper.

Sample RMA Shipping Label

ARISTA CORPORATION
Attention: RMA Department
40675 Encyclopedia Circle
Fremont, CA 94538
RMA: # _____

Package Identification

- Each box must reference the following information: Customer/Contact Name · Return Address · Phone Number · RMA Number (issued by an authorized ARISTA source).
- The RMA number must be written on the outside of the shipping container for identification purposes.
- Shipments not properly identified will be refused.
- To avoid any discrepancy of items received, please do not return accessories (manuals, driver CDs, OS CDs, cables, etc.) with the RMA unit in need of repair.
- If available, use the original box/packaging to ship back RMA unit to avoid transit damage.

RMA Rejection Policy

Products will not be accepted by Arista Corporation if not accompanied by a valid RMA number, which must be clearly marked on the outside of the package. Arista reserves the rights to return any RMA product received that does not comply with the information given on the original Return Material Authorization (RMA) request, such as:

- Invalid RMA number
- RMA number not visible and/or not on the box shipping label
- RMA condition described by the customer differs from the actual condition of the product
- Expired RMA number
- Unauthorized return (no RMA # was issued)
- No Arista serial number on the product
- Product is physically damaged

If you have any questions regarding Arista's RMA procedures, product returns policies and/or other similar issues, please call Arista's Customer Service and RMA Department during office hours, Monday through Friday (8:30am-5:30pm PST)

- Phone: (510) 226-1800 ext. 400
- Fax: (510) 226-1890
- Email: RMA@goaristaIPC.com

9. Arista's Limited Liability

- Arista Corporation is not liable for incidental or consequential damages resulting from the use of Arista products or arising out of any breach of Arista's full limited warranty.
- Under no equitable theory shall Arista Corporation be held liable for monetary and/or non-monetary damages resulting from the normal or abnormal usage of our products. Use, distribution and/or similar engagement of our products constitute implied agreement to these and similar Arista Corporation Limited Liability policies.
- Arista Corporation is not liable for damages or reimbursement for lost time, lost revenue, cost of having someone remove or re-install an installed unit if applicable, or travel to and from the service providers.
- All expressed and implied warranties, including the limited warranty of Merchantability are limited to the period of the limited warranty, unless, otherwise, indicated in writing by Arista Corporation.

Customer Responsibilities

- By requesting service, the eligible customer acknowledges the terms of the limited warranty, including the disclaimer and limitation of liability provision.
- Prior to seeking service, customers must back-up all data, programs, files and/or similar digital documents that may become damaged and/or lost due to service.
- Arista Corporation, WITHOUT LIMITATION, is not responsible for lost, damaged or otherwise destroyed data due to service.

10. Disclaimer

ARISTA RESERVES THE RIGHT TO CHANGE ANY OF ITS TERMS OF SERVICE, WARRANTY POLICIES, SERVICE PROGRAMS, SERVICE METHODS AND/OR SIMILAR POLICIES AT ANY TIME AND WITHOUT PRIOR OR FORMAL NOTICE TO ITS CUSTOMERS, VENDORS, RESELLERS, END USERS OR SIMILAR.

Frequently asked questions

What does 'refresh rate' mean in relation to an LCD display?
The refresh rate is of much less relevance for LCD displays. LCD displays stay at a stable, flicker-free image at 60Hz. There is no visible difference between 85Hz and 60Hz.

Are LCD display Plug-and-Play?
Yes, the displays are Plug-and-Play compatible with Windows XP, 7 and 8

What is a Liquid Crystal Display?
A Liquid Crystal Display (LCD) is an optical device that is commonly used to display ASCII characters and images on digital items such as watches, calculators, portable game consoles, etc. LCD is the technology used for displays in notebooks and other small computers. Like light-emitting diode and gas-plasma technologies, LCD allows displays to be much thinner than cathode ray tube (CRT) technology. LCD consumes much less power than LED and gas-displays because it works on the principle of blocking light rather than emitting it.

What is polarization ?
Polarization is basically directing light to shine in one direction.Light comes in the form of electromagnetic waves. Electric and magnetic fields oscillate in a direction perpendicular to the propagation of the light beam. The direction of these fields is called the 'polarization direction'. Normal or non-polarized light has fields in several directions; polarized light has a field in only one direction.

What kind of wide-angle technology is available? How does it work?
The TFT LCD panel is an element that controls/displays the inlet of a backlight using the dual-refraction of a liquid crystal. Using the property that the projection of inlet light refracts toward the major axis of the liquid element, it controls the direction of inlet light and displays it. Since the refraction ratio of inlet light on liquid crystal varies with the inlet angle of the light, the viewing angle of a TFT is much narrower than that of a CDT. Usually, the viewing angle refers to the point where the contrast ratio is 10. Many ways to widen the viewing angle are currently being developed and the most common approach is to use a wide viewing angle film, which widens the viewing angle by varying the refraction ratio. IPS (In Plane Switching) or MVA (Multi Vertical Aligned) is also used to give a wider viewing angle.

Disposal and Recycling Information

Your display and Local Host Transmitter must be disposed of properly according to local laws and regulations.
Because your remote control contains a battery, it must be disposed of separately from household waste.
When your display and Local Host Transmitter reach the end of their life cycle, contact your local authorities to know about recycling options.

This symbol on the product or in the manual means that your electrical or electric equipment should be disposed at the end of its life cycle separately from your household waste. There are separate collection systems for recycling in the EU. For more information, please contact the local authority or your retailer where you purchased the product.

Disclaimer and Copyright Notice

Disclaimer

All the information, design and specifications contained in this manual were correct in this publication. However, as the product goes under continuous upgrades, the final device may have slight differences. The contents of this manual is subject to changes without prior notice, and we shall not be liable for any errors contained herein or for incide or consequential damages in connection with the furnishing, performance, or use of this manual.

© Copyright 2014

The information contained in this user's manual and all accompanying documentation is copyrighted and all rights are reserved. This publication may not, in whole or in part, be reproduced, transcribed, stored in a retrieval system, translated into any language or computer language, or transmitted in any form whatsoever without the prior written consent from the manufacturer, except for copies retained by the purchasers for their personal archival purposes. The manufacturer reserves the right to revise this user's manual and all accompanying documentation and to make changes in the content without obligation to notify any person or organization of the revision or change.

IN NO EVENT WILL THE VENDOR BE LIABLE FOR DIRECT, INDIRECT, SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OR INABILITY TO USE THIS PRODUCT OR DOCUMENTATION; EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. IN PARTICULAR, THE VENDOR SHALL NOT HAVE LIABILITY FOR ANY HARDWARE, SOFTWARE, OR DATA STORED OR USED WITH THE PRODUCT, INCLUDING THE COSTS OF REPAIRING, REPLACING,OR RECOVERING SUCH HARDWARE, SOFTWARE, OR DATA.

All trademarks mentioned in this document are acknowledged. The specifications in this manual are subject to change without notice.

Arista Corporation
40675 Encyclopedia Circle, Fremont, CA 94538 U.S.A.
Tel: (510) 226-1800 Fax: (510) 226-1890
http://www.goarista.com